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CONFIRMATION NO. ATTORNEY DOCKET NO. FIRST NAMED INVENTOR FILING DATE APPLICATION NO. 10830-074001 6398 Nobuaki Ema 08/21/2001 09/933,691 08/08/2003 7590 26211 **EXAMINER** FISH & RICHARDSON P.C. 45 ROCKEFELLER PLAZA, SUITE 2800 STOCK JR, GORDON J NEW YORK, NY 10111 PAPER NUMBER ART UNIT 2877 DATE MAILED: 08/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
Office Action Summary	09/933,691	EMA, NOBUAKI
	Examiner	Art Unit
	Gordon J Stock	2877
Th MAILING DATE of this communication app ars on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status		
1) Responsive to communication(s) filed on <u>16 May 2003</u> .		
2a) ☐ This action is FINAL . 2b) ☑ Th	is action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) Claim(s) 1 and 5 is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1 and 5</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement. Application Papers		
9) The specification is objected to by the Examiner.		
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11)⊠ The proposed drawing correction filed on <u>16 May 2003</u> is: a)⊠ approved b)□ disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 		
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	nary (PTO-413) Paper No(s) nal Patent Application (PTO-152)
U.S. Patent and Trademark Office	4: 0	Part of Paper No. 5

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Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's disclosure of prior related art in view of Carlisle et al. (6,024,498) further in view of Kakii et al. (4,830,490) and further in view of Shimomura et al. (4,749,275).

As to claim 1, the applicant's disclosure teaches prior art apparatus comprising: a measurement unit for measuring an optical output signal output from the optical component (Fig. 3, 104 and 106 of applicant's disclosure); a first optical fiber which is connected to an input terminal of the optical component under test and inputs the measurement optical signal to the optical component (Fig. 3, 102 of applicant's disclosure); a second optical fiber which is connected to an output terminal of the optical component under test and transfers, to the measurement unit, an optical output signal output from the optical component under test (Fig. 3, 103 of applicant's disclosure); a position controller for adjusting relative positions between the first optical fiber, second optical fiber, and connective sections of the optical component such that insertion loss becomes a minimum (page 2 of applicant's disclosure). Applicant's disclosure is silent concerning the positioning to a maximum signal but discloses in prior art that there is positioning until insertion loss is minimized. However, Carlisle in fiber connector assembly teaches that achieving maximum signal transfer (minimum insertion loss) is a function of alignment of fiber cores. Therefore, it would be obvious to one skilled in the art that the

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connections are adjusted until the signal becomes maximum because the connections are adjusted until minimum insertion loss occurs which is equivalent to having maximum signal transfer achieved.

In addition, applicant's disclosure teaches the optical component has a plurality of output terminals and measurement equipment (power meters) (page 3; lines 1-6 of applicant's disclosure). Applicant's disclosure of prior related art is silent concerning a plurality of photodetectors. However, Kakii teaches in an apparatus for aligning optical fibers that power meters are used with photodetectors (col. 1, lines 25-30). Therefore, it would be obvious to one skilled in the art at the time the invention was made that when the optical component has a plurality of output terminals and power meters for each output terminal it would have a plurality of photodetectors associated with each power meter in order for the power meter to display the light levels detected by the associated photodetector. As for a plurality of output terminals coupled to photodetectors via second optical fibers, Examiner takes Official Notice that optical fibers are well known in the art for optical coupling. It would be obvious to one skilled in the art at the time the invention was made to have the output terminals of the component under test be connected to the photodetectors via fiber coupling in order to transmit the optical signal from the component to the photodetector.

In addition, Kakii teaches that power meters comprise a display unit (col. 1, lines 25-30).

As for switches, the applicant's disclosure of prior related art in view of Carlisle and Kakii are silent. However, Shimomura in an optical power meter system teaches using a switch to switch between detectors of varying wavelength sensitivity characteristics (col. 1, lines 39-50;

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col. 4, lines 15-30). Therefore, it would be obvious to one skilled in the art to provide a switch to switch between detectors of varying wavelength sensitivity characteristics.

As to claim 5, the applicant's disclosure teaches a prior related art method comprising: inputting a measurement optical signal to the optical component under test by way of a first optical fiber connected to an input terminal of the optical component under test; transmitting an optical signal output from the measurement optical component by way of a second optical fiber connected to an output terminal of the optical component under test; measuring an optical output signal output from the optical component under test on the basis of the optical output signal transmitted by way of the second optical fiber; adjusting relative positions between the first and second optical fibers and connections of the optical component under test such that insertion loss is minimized (Fig. 3 and page 2 of applicant's disclosure). Applicant's disclosure is silent concerning the positioning to a maximum signal but discloses in prior art that there is positioning until insertion loss is minimized. However, Carlisle in fiber connector assembly teaches that achieving maximum signal transfer (minimum insertion loss) is a function of alignment of fiber cores. Therefore, it would be obvious to one skilled in the art that the connections are adjusted until the signal becomes maximum because the connections are adjusted until minimum insertion loss occurs which is equivalent to having maximum signal transfer achieved.

In addition, applicant's disclosure teaches the optical component has a plurality of output terminals and measurement equipment (power meters) (page 3; lines 1-6 of applicant's disclosure). Applicant's disclosure of prior related art is silent concerning a plurality of photodetectors. However, Kakii teaches in an apparatus for aligning optical fibers that power meters are used with photodetectors (col. 1, lines 25-30). Therefore, it would be obvious to one

skilled in the art at the time the invention was made that when the optical component has a plurality of output terminals and power meters for each output terminal it would have a plurality of photodetectors associated with each power meter in order for the power meter to display the light levels detected by the associated photodetector. As for a plurality of output terminals coupled to photodetectors via second optical fibers, Examiner takes Official Notice that optical fibers are well known in the art for optical coupling. It would be obvious to one skilled in the art at the time the invention was made to have the output terminals of the component under test be connected to the photodetectors via fiber coupling in order to transmit the optical signal from the component to the photodetector.

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As for switches, the applicant's disclosure of prior related art in view of Carlisle and Kakii are silent. However, Shimomura in an optical power meter system teaches using a switch to switch between detectors of varying wavelength sensitivity characteristics (col. 1, lines 39-50; col. 4, lines 15-30). Therefore, it would be obvious to one skilled in the art to provide a switch to switch between detectors of varying wavelength sensitivity characteristics.

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Fax/Telephone Numbers

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

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1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and

2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: (703) 308-7722

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (703) 305-4787. The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

ΩΩ gs

July 16, 2003

Zandra V. Smith Primary Examiner